Fan name	Contemporary Architectural Analysis (ECTS 8)
Subject/module code	ZAT2508
Science teachable semesters	5 semesters
Attached teacher	Khalikov Sindorkul Ravshanovich, associate professor
Education language	Uzbek
Science type	Selection
Study hours (including independent learning)	**Total hours - 240.** **Auditory training hours - 96.** Lecture session hours - 24 Laboratory study hour - 0 Practical study hours - 72 **Independent education -144 hour**
ECTS	8
Aims and objectives of science / learning outcomes	**The purpose of teaching science is** to The course aims to develop students' systematic knowledge of the formation and development of modern architecture from the end of the 19th century to the present, its main theoretical directions, stylistic features, and the creative work of leading architects. It also aims to develop the skills of analyzing modern architectural objects from a historical, theoretical, functional, constructive, volumetric-spatial, artistic-compositional, and aesthetic perspective, comparing different architectural trends, and applying the acquired knowledge in the process of architectural design. **The task of science** • to teach the stages of formation and development patterns of modern architecture; • To provide knowledge about the main architectural movements and trends that emerged in the 19th–21st centuries; • study the specific characteristics of modernism, functionalism, rationalism, constructivism, expressionism, brutalism, postmodernism, deconstructivism, and High-Tech; • analysis of the work of architects and the activities of architectural schools that have played an important role in world architecture; • evaluation of functional, constructive, volumetric-spatial, and artistic-compositional solutions of modern buildings; • analyze architectural objects in relation to their historical, social, cultural, and natural environments; • study the application of new building materials, structures, and technologies in modern architecture; • to develop independent thinking, scientific-analytical approach, and graphic representation skills in students. **Learning outcomes:** A student who has mastered the subject should have the following knowledge, skills, and competencies: **TN1.** Knowledge of the history of the formation, stages of development, theoretical foundations and main directions of modern architecture. **TN2.** Understand the specific characteristics of architectural movements that emerged in world architecture in the 19th–21st centuries, such as modernism, functionalism, rationalism, constructivism, expressionism, brutalism, postmodernism, deconstructivism, and High-Tech. **TN3.** Analyze architects who have made a significant contribution to the development of world architecture, their creative style, and important architectural works.

	TN4. Identify and evaluate the functional, volumetric-spatial, constructive, artistic-compositional, and aesthetic characteristics of modern buildings. **TN5.** Comparative analysis of architectural objects in relation to their historical, social, cultural, natural, and urban environments. **TN6.** Application of modern architectural experience in the architectural design process, preparation of analytical drawings, schemes, sketches and presentation materials.
Course content (topics)	**I. Home theoretical part (Lecture)** **Subject 1:** The concept of modern architecture, its formation factors and stages of development; **Topic 2:** New trends in architecture in the late 19th and early 20th centuries. Modern and Art Nouveau; **Topic 3:** Theoretical foundations and principles of formation of modernist architecture. Bauhaus school; **Topic 4:** Functionalism and rationalism: the interrelationship of architectural form, function, and construction; **Topic 5:** International Style: volumetric, spatial and compositional solutions of modern buildings; **Topic 6:** The harmony of nature and the human factor in organic architecture and modern architecture; **Topic 7:** Expressionism and Constructivism: Architectural Form and Constructive Explorations; **Topic 8:** Post-war modern architecture. Brutalism and monumental architectural solutions; **Topic 9:** Postmodern Architecture: Historical Heritage, Symbolism, and Contemporary Architectural Expression; **Topic 10:** Deconstructivism and the use of complex geometric shapes in modern architecture; **Topic 1 1 :** Innovative constructive and technological solutions in High-Tech and modern architecture; **Topic 1 2 :** Development trends in 21st century architecture: ecological, sustainable and digital architecture . **II. Guidelines and recommendations for organizing laboratory exercises.** Laboratory exercises are not included in the standard curriculum for the subject. **III. Instructions and recommendations for practical training** **Recommended practical topics** : **Topic 1. The formation of modern architecture.** 1. Analyze the stages of formation of modern architecture using the example of historical and architectural objects; 2. Analysis of the compositional features of Art Nouveau and modernist buildings of the late 19th and early 20th centuries 3. Analyze the harmony of organic form, construction, and artistic expression in the work of Antoni Gaudi; **Topic 2. Modernist architecture.** 4. Analysis of the architectural principles and projects of the Bauhaus school; 5. Identify the principles of modernism in the projects of Walter Gropius and Le Corbusier; 6. Comparative analysis of functional and volumetric-spatial solutions in modernist architecture; **Topic 3. Functionalism and rationalism.** 7. Analysis of planning solutions for buildings in the functionalist direction; 8. Study the relationship between the constructive system and architectural form in rationalist architecture;

	9. Comparative analysis of architectural objects in the direction of functionalism and rationalism; **Topic 4. International style.** 10. Analysis of facade and volumetric-compositional solutions of buildings in the international style; 11. Study of minimalism, constructive precision, and spatial freedom in the work of Mies van der Rohe; 12. Analyze the influence of the International Style on the architecture of residential and public buildings; **Topic 5. Organic architecture.** 13. Analyze the harmony of building and natural environment in Frank Lloyd Wright's projects; 14. Study the relationship between the human factor and the architectural environment in the work of Alvar Aalto; 15. Volumetric-spatial and artistic-compositional analysis of organic architectural objects; **Topic 6. Expressionism and constructivism.** 16. Analyze the architectural form and composition of buildings in the direction of Expressionism; 17. Study of new constructive and spatial solutions in constructivist architecture; 18. Comparative analysis of objects of expressionism and constructivism **Topic 7. Post-war architecture and brutalism.** 19. Analyze the development characteristics of post-war modernist architecture; 20. Study the relationship between material, structure, and architectural form in buildings in the Brutalist style; 21. Analysis of spatial organization and monumental composition in the work of Louis Kahn; **Topic 8. Postmodern architecture.** 22. Analyze the artistic, figurative and symbolic characteristics of buildings in the direction of postmodernism; 23. Study the harmony of historical form and modern architectural expression in postmodernist architecture; 24. Comparative analysis of the compositional and aesthetic characteristics of postmodernist objects; **Topic 9. Deconstructivism.** 26. Study the formation and basic compositional principles of deconstructivist architecture; 27. Analyze the dynamic forms and spatial organization methods in Zaha Hadid's projects; 29. Comparative analysis of geometric and volumetric-spatial solutions of buildings in the direction of deconstructivism; **Topic 10. High-Tech Architecture.** 28. Analysis of the structural and technological characteristics of buildings in the High-Tech direction 29. Study of innovative constructions and engineering solutions in the work of Norman Foster 30. Analysis of the harmony of construction, material and aesthetic expression in High-Tech architecture **Topic 11. Modern ecological and sustainable architecture.** 31. Analysis of the principles of using natural climatic factors in ecological architectural objects 32. Study of architectural and structural solutions for energy-efficient buildings 33. Analysis of the harmony of landscape, building and natural environment in green architectural objects

	Topic 12. Modern trends in 21st century architecture. 34. Analysis of the formation of new architectural forms in digital and parametric architecture 35. Study of innovative functional and spatial solutions in modern public buildings 36. Comparative analysis of modern architectural objects of Uzbekistan with the experience of world architecture. **IV. Independent study and independent work.** Independent learning competence serves to support students' independent self-development and increase the effectiveness of professional activities. Students perform independent work on their mobile devices under the guidance of a teacher in a traditional or electronic form. **Recommended topics for independent study:** 1. Social, economic, technological and cultural factors that influenced the formation of modern architecture; 2. Artistic and compositional features of Art Nouveau and modern architecture; 3. The influence of the Bauhaus school on the development of architecture, design, and architectural education; 4. Theoretical and practical principles of modern architecture in the work of Le Corbusier; 5. The spread and regional characteristics of the International Style in world architecture; 6. The harmony of organic architecture and the natural environment in the work of Frank Lloyd Wright; 7. Principles of humanism and architectural environment in the work of Alvar Aalto; 8.The Chicago School and the development of high-rise architecture; 9. Specific aspects of expressionist and constructivist architecture; 10. Concrete, construction, and artistic expression in Brutalist architecture; 11. Architectural space and monumental composition in the work of Louis Kahn; 12.Historical heritage and symbolic expression in postmodernist architecture; 13. Geometric form and spatial composition in deconstructivist architecture; 14. Digital design and complex architectural forms in the work of Zaha Hadid; 15. Innovative structures and modern materials in High-Tech architecture; 16. Principles of bioclimatic design in modern ecological architecture; 17. The role of parametric design, BIM and digital technologies in 21st century architecture; 18. Comparative analysis of the development trends of modern architecture of Uzbekistan and world experience.
Student assessment	Assessment of student knowledge is based on the mastery of teaching materials (tests, assignments, written and oral work results) during the semester and final examination. During the physics course, students are evaluated on a 100-point system. Of these, 50 points are allocated to the current and intermediate results (60% of the 50 points are current control, independent study and 40% intermediate control), and 50 points are allocated to the final control result. Students whose total score of current and intermediate points is less than 30 points are not admitted to the final control exam. A student who scores 30 or more points in the final control is considered to have mastered

	the subject.
Exam requirements	The student must have fully mastered the theoretical and practical concepts of the subject, be able to correctly reflect the results of the analysis. The student must have completed the tasks assigned in the independent work, current and intermediate forms of assessment. At the same time, he must have received the necessary points from the current, intermediate, independent education and final tests in the relevant subject within the specified time . A student who has not submitted current control, intermediate control, and independent learning assignments, as well as who has scored less than 30 points for these assignments and control type, will not be included in the final control type. Also, a student who misses 25 percent or more of the classroom hours allocated to a subject without an excuse will be expelled from that subject, will not be allowed to take the final exam, and will be considered to have not acquired the appropriate credits in that subject. A student who fails a final exam or scores between "0-29.9" on this type of exam is considered an academic delinquent.
Recommendation literature	**Main literature** 1. SR Khalikov. Foreign modern architecture. Textbook. Jizzakh: Publishing house of the state institution "JIZAKH STATE PEDAGOGICAL UNIVERSITY", 2026. – 304 pages. 2 Janizakov AE Analysis of building structures. Textbook. Jizzakh, JizPI Publishing House, 2026. –243 pages. 3 Janizakov AE Architectural construction. Textbook. Jizzakh, JizPI publishing house, 2024. –277 pages. **Additional literature** 4. Abdullayev Sh. History of Architecture. Part I: textbook. – Tashkent: NMIU named after Cholpon, 2018. – 276 p. – ISBN 978-9943-5380-3-0. 5. Isamukhamedova D., Adilova L. Fundamentals of urban planning and landscape architecture: a textbook. – Tashkent, 2014. 6. Bobobekov BQ, Usarov JT Fundamentals of architectural design: a textbook. – Jizzakh: “JizPI Typography” publishing house, 2026. – 250 p. – ISBN 978-9910-251-10-8. 7. Usarov Jamoliddin Tulkinovich //Architecture of civil buildings// Textbook, Jizzakh-2026, “JizPI Typography” publishing house, p. 255. **Information sources** 8. www.ZiyoNET.uz. 9. "KISO KUROKAVA". www.kisho.co.jp. 10. https://uz.wikipedia.org/ 11. Payton Chung flickr.com 12. https://dubaization.com/dubaization